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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,795	12/20/2001	Kazushige Ohno	P21144	4566
7055	7590	05/24/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			NGUYEN, CAM N	
			ART UNIT	PAPER NUMBER
			1754	
DATE MAILED: 05/24/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,795

Applicant(s)

OHNO ET AL.

Examiner

Cam N Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/20/01 (which is a 371 of PCT/JP00/040 84)
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 and 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-7 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>March 20, 2002</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election with traverse of Group I, claims 1-7 & 14, in Paper No./Mail Dated 02/05/04 is acknowledged. The traversal is on the ground(s) that "a search for the catalytic carrier of Group I should cover many areas which are relevant for the method of Group II. Therefore, as a practical matter, the searches for the Groups should significantly overlap. Thus, the search burden would not be serious.

Incidentally, the Restriction Requirement does not allege that there is a serious search burden." (applicants' response page 3, second paragraph). This is not found persuasive because the search required for Group I is not required for Group II. Therefore, if both groups are searched, an additional burden is imposed on the Examiner due to two different search areas being required.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 8-13 & 15-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No./Mail Dated 02/05/04.

Claim Rejections - 35 USC § 112 (Second Paragraph)

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2 & 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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A. Regarding claim 2, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

See MPEP § 2173.05(d).

B. Regarding claim 2, it is unclear as to whether the silicon-containing ceramic carrier is constructed with a carrier including both the non-oxide ceramic and oxide ceramic materials or either one because the claim recites the term "and" in line 5.

C. Regarding claim 4, line 3, it is considered the term "honeycomb-like porous silicon carbide" does not particularly point out the honeycomb material of the invention. Thus, renders the claim vague and indefinite.

Claim Rejections - 35 USC § 102(b)

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4 & 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoekstra (US Pat. 3,767,453).

Hoekstra discloses a high surface area alumina as a uniform thin film is coated on particulate, finely divided support (see col. 1, ln 46-47 & 56-58), such as cordierite ceramic honeycomb support (see col. 2, ln 5-6 & col. 4, claim 2). Suitable ceramic materials including cordierite, mullite, aluminum silicates, etc. (see col. 1, ln 30-35).

Regarding claims 1-4, Hoekstra discloses the claimed catalyst carrier, thus anticipates the claims.

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Regarding claim 6, while the reference is silent with respect to the characteristics of the alumina thin film, it is considered the disclosed carrier possess the same characteristics in view of the same carrier disclosed.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5, 7, & 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoekstra (US Pat. 3,767,453).

Hoekstra discloses a carrier as described above, except for the silica (SiO₂) and alumina amounts in the carrier.

However, it would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have predetermined the silica and alumina amounts sufficient to result in an effective carrier in Hoekstra since it involves only routine experimentation and within the level of a person having the ordinary skill in the art. See *In re Boesch*.

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Citations

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bricker et al. (US Pat. 4,919,902), Onal (US Pat. 4,572,904), Ono et al. (US Pat. 4,483,940), Onal (US Pat. 4,702,897) are cited for related art.

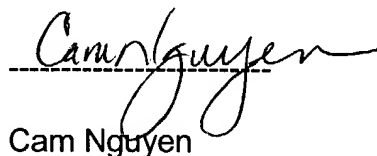
Conclusion

10. Claims 1-18 are originally pending in the application. Claims 1-7 & 14 are rejected. Claims 8-13 & 15-18 are withdrawn due to nonelected (distinct) invention. No claims are allowed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Cam Nguyen, whose telephone number is (571) 272-1357. The examiner can normally be reached on M-F from 9:30 am. to 6:00 pm.

The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to telephone number (571) 272-1700.


Cam Nguyen

Primary Examiner

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Nguyen/cnn *cnn*

May 20, 2004